### Port of San Diego

#### Jurisdiction

- **5** member cities
- **34** miles of waterfront
- **2,403** acres of land
- **3,535** acres of water
- **22** public parks
- **2** cargo terminals
- **2** cruise ship terminals

#### Map:
- Port Tidelands
- Submerged Tidelands
Regional Economic Role

$8.3 BILLION
9% increase from 2013 to 2015
Efficiency – Port Operations

Since 2006

- Water Use Reductions: 56%
- Energy Use Reduction: 31%
- Costs Avoided: $8 million
Seal Level Rise Ad-Hoc Planning Process

- Conduct Vulnerability Assessment
- Prepare a fiscal analysis
- Develop Policies and Plan
- Identify Adaptation Strategies
- Implement, Monitor, Revise

Assist the Port to evaluate vulnerability from coastal flooding and inundation related to sea level rise.
Sea Level Rise Ad-Hoc Committee

Members
- Department of Navy
- Center for Sustainable Energy
- BAE Systems
- Port Tenants Association
- San Diego State University
- University of California, San Diego
- Shelter Island Marina
- US Fish and Wildlife
- Environmental Health Coalition
- Southwest Wetlands Interpretative Association

Advisors

Scripps Institution of Oceanography
Dr. Julie Kalansky

United States Geological Survey
Dr. Juliette Finzi-Hart

ICF International
Dr. Robert Kay

Nexus Planning & Research
Dennis Larson
Sea Level Rise Ad-hoc Committee

2017
- Background on SLR Science and Coastal Modeling
- Vulnerability Assessment
- Identify assets to be analyzed
- Progress on Vulnerability Assessment
- Recommendations from the Ad Hoc Committee

2018
- New ad-hoc committee to review
- Vulnerability study
- Adaptive management strategies
- Monitoring program
Memorandum of Agreement
Coordinate on Sea Level Rise Planning
Port of San Diego
&
Commander, Navy Region Southwest
Planning Initiatives

- Port is evaluating impacts of sea level rise pursuant to Assembly Bill 691.
- Planning for nature-based solutions to protect coastal resources.
- DOD has conducted over 700 assessments of flooding at coastal installations worldwide.
- Navy has forged partnerships with state and local governments to advance sea level rise planning.
Memorandum of Agreement

- First MOA between Navy and Port on the West Coast.
- Appoints qualified staff to:
  o Coordinate sea level rise planning initiatives.
  o Share sea level rise policies, assessments, and guidance.
  o Re-evaluate science every five years.
  o Identify complimentary adaptation strategies.
  o Implement pilot projects as feasible.
Restoration & Enhancement Projects
South San Diego Bay
Restoration & Enhancement Projects for resiliency South San Diego Bay

Restoration & Enhancement 280 acres

Pond 20

Living Shoreline
Restoration & Enhancement
280 acres
Grant Funding provided by:

- US Environmental Protection Agency
- Port Environmental Fund
- California Coastal Conservancy
- US Fish & Wildlife Service
- NOAA – stimulus funds
Volunteer Assistance provided by

- SD Audubon Society
- SD Oceans Foundation
- Ocean Discovery Institute
- Coronado Rotary Club
Living Shoreline
“Living shorelines utilize natural habitat elements to protect shorelines from erosion while providing critical habitat for fish, wetlands and aquatic plants, as well as wildlife”

Partners include:
- Port of San Diego
- California Coastal Conservancy
- US Fish & Wildlife Service Coastal Program
- Technical Advisory Committee

Native Oyster Reefs
- Climate change and sea level rise pose a threat to both developed coastal lands and remaining undeveloped coastal habitats
- Prevent large scale engineered armoring of shorelines
- Increase ecological value
Living Shoreline

Native Oyster Reefs

- Native oyster recruitment
- Unarmored shoreline
- Adjacent to marshland
- Moderate to high wave energy environment
- 2,300 linear feet of shoreline
Living Shoreline

Native Oyster Reefs

- Resiliency for storm surge
- Erosion protection for shoreline
- Water Quality filtering by oysters

Status
- 90% Design
- Need construction funding - $500,000
Mitigation Bank at Pond 20
Mitigation Banking

- 95 acres
- Former salt evaporation pond
- Coordinating mitigation bank with adjacent FWS restoration
- Create tidal wetlands
Mitigation Banking

- Public comments on Prospectus
  - August 2018
- EIR - Notice of Preparation
  - in the Fall 2018
- Construction
  - Fall 2020
Questions / Discussion

Eileen Maher
emaher@portofsandiego.org
619-686-6254